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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,397	07/12/2005	Shinya Kataoka	04970/0203114-US0	3077

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EXAMINER	
WILLIAMS, MAURICE L	

ART UNIT	PAPER NUMBER
3611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/542,397	KATAOKA ET AL.	
	Examiner	Art Unit	
	Maurice Williams	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 9-20* is/are rejected.

7)☒ Claim(s) *8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 July 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/12/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Examiner's Appendix*.

DETAILED ACTION

Remarks

The previous office action for this application was sent in error. Therefore, the previous action is vacated. A new action is provided below.

Information Disclosure Statement

1. The information disclosure statement filed 7/12/05 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for developing the reference manipulation force and a walker must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 9-11 and 18-20 are objected to because of the following informalities: The preamble of the independent claims should state the same structure as the claim from which it depends, while the additional limitations (i.e. a push cart) should be included in the body of the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2 and 12-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no corresponding structure provided for the means for developing the reference manipulating force.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7, 9, 12-16 and 18 rejected under 35 U.S.C. 102(b) as being anticipated by Satoshi (JP-8-142873). Satoshi discloses a force input manipulator comprising:
an applied force detector (**11**) which detects the manipulating force applied to the manipulating unit;
an operation mode selector (**15**) which decides a reference manipulating force closest to the detected manipulating force applied out of a plurality of reference manipulating forces stored in advance in correlation with a plurality of operation modes (Figs. 4, 6, and 8 show the wheel positions for each operating mode), and selects the operation mode corresponding to the decided reference manipulating force (the operation mode is determined from the direction that the grip is moved, which requires force to displace); and a motion control signal generator (**18**) which outputs a motion control signal for controlling the motion of the object according to the selected operation mode.

Satoshi also discloses a means for developing and storing the reference manipulating force based on the applied manipulating force.

The applied force detector is a biaxial force sensor (Fig. 1: arrows show that the grip can be displaced along transverse axes) which detects a force acting in a direction with respect to the object and in another direction intersecting the first mentioned direction.

In addition, the applied force detector includes a plurality of force sensors (**11a-c**), out of which at least two sensors are employed for one direction (**11a** and **11b** detect the right and left movement of the lever, *see* Examiner's appendix - ¶ 0015).

The operation mode is one of moving straight (Fig. 4), changing a direction (Fig. 6) and rotating (Fig. 8).

The operation mode selector stores a decision region defined by a magnitude (a requisite magnitude of force is required to move the lever, indicated by the fact that the lever is an auto return mechanism, Examiner's Appendix, ¶ 0009) and acting direction of the force (Figs. 1, 4, and 6 show the various positions of the arrows and the corresponding movement) with respect to each reference manipulating force, so as to specify the decision region to which the applied manipulating force belongs, based on the magnitude and acting direction thereof, and thus to decide the reference manipulating force closest to the applied manipulating force.

The operation mode selector has a decides the reference manipulating force (force required to move the lever, along with the corresponding direction) closest to the applied manipulating force, based on a difference in direction between the acting direction of the applied manipulating force and that of the reference manipulating force

(the direction that the vehicle travels is determined by the movement of the lever as shown by the wheel positions and the arrow designations **B1, B2** in Figs 4 and 6). The mobile object (Fig. 4) moves according to the motion control signal output by the motion control signal generator (Examiner's Appendix, ¶ 0021 explains that **18** drives the drive wheels).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi in view of Smith (US 6,276,469). Satoshi discloses as discussed above, but does not directly disclose a push cart. Smith discloses a push cart (Fig. 1). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Satoshi as taught by Smith in order to provide an alternative manner in which to manipulate the movement of the push cart.

10. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi in view of Lathrop (US 5,524,720).
Satoshi discloses as discussed above, but does not directly disclose a walker. Lathrop discloses a walker. Therefore, it would have been obvious to a person having ordinary

skill in the art at the time of the invention to modify Satoshi as taught by Lathrop in order to provide the operating lever on a device that would typically use a handle to manipulate its driving direction.

Allowable Subject Matter

11. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Trego (625), Lindsay (157), and Weiss (720).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurice Williams whose telephone number is (571) 272-4263. The examiner can normally be reached on Monday - Friday, 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (571) 272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Maurice Williams
Examiner
Art Unit 3611

MLW
September 26, 2007

LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Examiner's Appendix

(English translation of JP-8-142873

CLAIMS

[Claim(s)]

[Claim 1] While being the grip grasped when it is attached in the head of the lever rod in which tilting actuation is free from a standing-up condition and tilting actuation of said lever rod is carried out It is the grip for control levers which consists of the movable grip section in which revolution actuation is free to the predetermined revolution center valve position centering on the longitudinal shaft of said lever rod to the fixed grip section fixed to said head, and said fixed grip section. The fingerplate section for hooking the finger which carries out revolution actuation of this movable grip section is formed in the grip surface of said movable grip section. The grip for control levers characterized by forming the configuration of the grip surface of said fixed grip section so that the grip surface and said longitudinal shaft orientations of said movable grip section which is in said revolution neutral condition at least may be followed.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view of the grip for control levers concerning this invention.

[Drawing 2] The above-mentioned grip grasps and it is the explanatory view of the direction.

[Drawing 3] It is the III direction view drawing in drawing 2 .

[Drawing 4] It is the perspective view of the vehicle for high lift work equipped with the above-mentioned control lever.

[Drawing 5] It is the block diagram of the transit control device in the above-mentioned vehicle for high lift work.

[Drawing 6] It is the actuation explanatory view of the above-mentioned transit control unit.

[Drawing 7] It is the top view of the above-mentioned grip.

[Drawing 8] It is the perspective view showing the 2nd example of the above-mentioned grip.

[Drawing 9] It is the perspective view of the conventional grip.

[Description of Notations]

1 Control Lever

2 Rod

3 Grip

31 Fixed Grip Section

32 Movable Grip Section

32b Fingerplate section

5 Vehicle for High Lift Work (Four-Flower Steering Vehicle)

EXAMPLE

[0009] It explains referring to a drawing about the desirable example of this invention hereafter. Drawing 1 shows the control lever equipped with the grip concerning this

invention. This control lever 1 consists of a rod 2 which can be freely tilted in all the directions that contain front and rear, right and left (the direction of arrow heads F, B, L, and R) centering on a soffit, and an above-mentioned grip 3 attached in the upper bed (head) of this rod 2. A rod 2 is the standing-up location (tilting center valve position) NI shown in drawing in the condition that tilting actuation is not carried out. An auto return is carried out. Moreover, a grip 3 is arranged at this fixed grip section [which was fixed to the head of a rod 2] 31, and fixed grip section 31 upside, and consists of the movable grip sections 32 which can rotate freely right and left (the direction of arrow heads tangent line and TR) focusing on longitudinal shaft 2a of a rod 2. In addition, the movable grip section 32 is the revolution center valve position NT in the condition that revolution actuation is not carried out. An auto return is carried out.

[0010] In such a control lever 1, an operator can grasp the side face of the whole grip surface 31 of a grip 3, i.e., the fixed grip section, and the movable grip section 32 together, and can do tilting actuation of the rod 2. Moreover, the side face of the movable grip section 32 can be grasped, and revolution actuation of this movable grip section 32 can be carried out.

[0011] Here, although the movable grip section 32 has the configuration which used the cylindrical shape as the base, the side face of this movable grip section 32 consists of heights (part equivalent to circumferential side face of cylindrical shape) 32a of the shape of radii which is arrange for every 90 hoop directions and swells to the method of the outside of the direction of a path, and radii-like crevice (fingerplate section) 32b which is arrange between these heights 32a and crater in the method of the inside of the direction of a path. For this reason, in case the side face of the movable grip section 32 is grasped by Hand H so that drawing 2 and drawing 3 may show, a finger can be hooked on the wall of crevice 32b, and the force (grip) which grasps a side face can be finished small.

[0012] Moreover, it has the side-face configuration where the upper part of the fixed grip section 31 is also equal to the movable grip section 32 so that drawing 1 may show. That is, the side face of the fixed grip section 31 also consists of heights 31a of the shape of radii which is arranged for every 90 hoop directions and swells to the method of the outside of the direction of a path, and radii-like crevice 31b which is arranged between these heights 31a and cratered in the method of the inside of the direction of a path. And the movable grip section 32 is the revolution center valve position NT. When it is, the side face of the movable grip section 32 and the side face of the fixed grip section 31 continue in the vertical direction. For this reason, in case the whole side face of a grip 3 is grasped together, as shown in drawing 3 , a finger can be hooked on both the crevices 31b and 32b, and tilting actuation of the rod 2 can be carried out, preventing that the movable grip section 32 rotates.

[0013] in addition, four hoop direction locations of crevice 31b in the fixed grip section 31 are locations which meet the front (the direction of an arrow head F), back (said -- the direction of B), a left (said -- the direction of L), and the method of the right (said -- the direction of R), respectively. For this reason, if the finger is hooked on crevice 31b which meets ahead for example, even if it does not inspect a direction visually one by one, the front can recognize which direction it is and other directions can give aim collectively. Therefore, even when lighting is not fully obtained in night etc., it can be certainly operated in the actuation direction of a request of a control lever 1.

[0014] This control lever 1 is used for transit control of the vehicle for high lift work

(four-flower steering vehicle) 5 shown in drawing 4 . This vehicle for high lift work 5 consists of the benches 8 attached in the vertical direction at the anterior part of the transit truck 6 with four wheels (the right front wheel FR, the left front wheel floor line, the right rear wheel RR, and left rear wheel RL), and this transit truck 6 at a level with the upper part of the rise-and-fall post 7 elastically constituted in the shape of a telescope, and this rise-and-fall post 7. Centering on the support pin 61 attached in the transit truck 2, a steering revolution is right and left possible for each of four above-mentioned wheels, and they has a role of a steering control wheel. Moreover, by the motor which is not illustrated, revolution actuation is carried out and the right front wheel FR and the left front wheel floor line also have a role of a driving wheel. The control box 9 is attached in the anterior part of the bench 8, and the control lever 1 mentioned above with the control lever (a number is not assigned) for controlling rise-and-fall actuation of the bench 8 is attached in this control box 9.

[0015] The transit control unit which performs transit control of the transit truck 6 according to actuation of a control lever 1 is built in the control box 9. Hereafter, this transit control unit is explained using drawing 5 . The transit control unit 10 consists of the actuation detector 11, the mode selector 15, a computing element 16, a steering controller 17, and an actuation controller 18. An actuation detector 11 consists of tilting sensor before and after outputting tilting signal before and after responding to direction tilting location of rod 2 order (F, B) in control lever 1 11 a, right-and-left tilting sensor 11 b which output the right-and-left tilting signal according to the right-and-left (L, R) direction tilting location of a rod 2, and revolution sensor 11c which output in the revolution position signal according to the revolution location of a grip 2 (the movable grip section 32).

[0016] A mode selector 15 is based on a revolution position signal from revolution sensor 11c, and the revolution location of the movable grip section 32 is the revolution center valve position NT. Or it judges whether it is rotating to one of right and left. Revolution center valve position NT When it judges, the signal and the above-mentioned revolution position signal which choose crab transit mode are sent out to a computing element 16, and when it judges that it is in the location rotated right and left, the signal and the above-mentioned revolution position signal which choose turning transit mode are sent out to a computing element 16.

[0017] The tilting signal outputted from order tilting sensor 11a and right-and-left tilting sensor 11b is inputted into a computing element 16 besides revolution sensor 11c and the signal from a mode selector 15. Based on these signals, a computing element 16 sets them as it, as the steering angle of each wheels FR, floor line, RR, and RL in the selected mode and the actuation rate of driving wheels FR and floor line are explained below.

[0018] First, a computing element 16 computes the tilting direction and tilting angle of a control lever 1 for the signal which chooses crab transit mode from a mode selector 15 from an order tilting signal and a right-and-left tilting signal at the time of a carrier beam. Specifically vector composition of order and the tilting direction to right and left is carried out, the tilting direction of a control lever 1 is searched for, and the tilting angle of a control lever 1 is searched for from this tilting direction, order, or a right-and-left tilting angle. And a computing element 16 outputs the driving signal made to drive at the rate corresponding to the tilting angle which computed driving wheels FR and floor line to the actuation controller 18 while outputting a steering signal which is turned in the tilting

direction which computed all the wheels FR, floor line, RR, and RL to the steering controller 17.

[0019] The steering controller 17 turns all the wheels FR, floor line, RR, and RL in the above-mentioned tilting direction (direction only the include angle A1 turned [direction] to the right to Front F in this example), as shown in drawing 6 (A), and the actuation controller 18 drives driving wheels FR and floor line at the rate corresponding to the above-mentioned tilting angle. Thereby, the transit truck 6 is an arrow head B1, with the front F turned to. It runs in a direction. The rate at this time corresponds to the above-mentioned driving signal (namely, tilting angle of a control lever 1), and an actuation rate becomes quick, so that a tilting angle is large.

[0020] On the other hand, a computing element 16 computes the hand of cut of the movable grip section 32, an include angle, and a tilting-before and after control lever 1 angle for the signal which chooses turning transit mode from a mode selector 15 at the time of a carrier beam. In this case, while only the amount corresponding to angle of rotation turns front wheels FR and floor line to this hand of cut, a steering signal which becomes a front wheel and an opposite phase about rear wheels RR and RL is sent out to the steering controller 17. Furthermore, a computing element 16 sends out the driving signal which drives driving wheels FR and floor line at the direction and rate corresponding to a tilting-before and after control lever 1 angle to the actuation controller 18.

[0021] for example, while turning the movable grip section 32 in the direction of right R, a control lever 1 is tilted in the direction of before F -- making -- a case -- the steering controller 17 -- As shown in drawing 6 (B), it is the above-mentioned hand of cut (in this example) about front wheels FR and floor line. Front F -- receiving -- include angle A2 only -- while turning in the direction suitable for the right, rear wheels RR and RL are made into a front wheel and an opposite phase (condition in which only the include angle A2 turned to the right to Back B), and the actuation controller 18 drives driving wheels FR and floor line at the rate corresponding to the tilting angle before and after the above. Thereby, the transit truck 6 is arrow-head B-2. It runs circling rightward which front wheels FR and floor line turned to so that it may be shown. In addition, revolution actuation of the movable grip section 32 is the same as the above, and when a control lever 1 is made to tilt back, driving wheels FR and floor line drive to the above and reverse, and it circles in the transit truck 6 rightward, retreating.

[0022] Thus, even when tilting actuation of the control lever 1 is carried out in the same direction, transit control which is completely different by whether revolution actuation of the grip 3 (movable grip section 32) is carried out is performed. For this reason, also with thinking that only tilting actuation of a control lever 1 was performed for example, in order to perform transit control in crab transit mode, in having rotated the movable grip section 32 to the inside of unconscious, transit control in turning transit mode will be performed, and there is a possibility that a desired location cannot be made to move in a vehicle for high lift work 5.

[0023] In this control lever 1, as mentioned above however, the side face of a grip 3 (the fixed grip section 31 and movable grip section 32) The fixed grip section 31 and revolution center valve position NT When the existing movable grip section 32 is grasped together Even if it is the configuration which can carry out tilting actuation and the movable grip section 32 rotates, preventing the revolution of the movable grip section 32

As shown in drawing 7 , this can be recognized through the side face of the fixed grip section 31 and the side face of the movable grip section 32 becoming discontinuous in the vertical direction (direction vertical to space in drawing 5), and it is the revolution center valve position NT about ** and the movable grip section 32. It can return.

[0024] Moreover, as shown in drawing 5 , a revolution control input can be grasped easily and certainly from the gap condition of the side face of the movable grip section 32, and the side face of the fixed grip section 31 to carry out revolution actuation of the movable grip section 32, and perform transit control in turning transit mode.

[0025] In addition, in the above-mentioned example, it does not pass for one example of the configuration of a grip to have been shown, and the configuration of the grip of this invention is not restricted to this. For example, as shown in drawing 8 , while forming movable grip section 32' in the shape of a cylindrical shape mostly, projection (fingerplate section) 32b' in circumferential side-face 32a' which projects in the method of the outside of the direction of a path, and is prolonged in the vertical direction for every 90 hoop directions may be prepared. Even in this case, in case movable grip section 32' is grasped, a finger can be hooked on projection 32b' and the force (grip) to grasp can be finished small. Moreover, the side-face configuration of fixed grip section 31' has a side-face configuration equal to movable grip section 32' even in this case. That is, it is formed from circumferential side-face 31a' and projection 31b' prolonged in the vertical direction while being prepared for every 90 hoop directions in this circumferential side-face 31a' and projecting in the method of the outside of the direction of a path.

[0026] And movable grip section 32' is the revolution center valve position NT. When it is, the side face of movable grip section 32' and the side face of fixed grip section 31' continue in the vertical direction. For this reason, in case whole grip 3' is grasped together, a finger can be hooked on both projection 31b' and 32b', and tilting actuation of rod 2' can be carried out, preventing that movable grip section 32' rotates. in addition, four projection 31b' prepared in fixed grip section 31' is prepared in the location which meets the front (direction shown by the arrow head F), back (said -- the direction shown by B), the left (said -- the direction shown by L), and the method of the right (said -- the direction shown by R), respectively. For this reason, front and rear, right and left can be recognized with the sensation of the hand which grasped grip 3' (fixed grip section 31').

[0027] moreover, the above -- although any example explained the control lever for transit control of a vehicle for high lift work (four-flower steering vehicle), the control symmetry by the control lever of this invention is not restricted to this, and can be used for actuation control of the boom in which boom hoisting, telescopic motion, and a level turn are free.